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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/716,505	11/20/2003	Dale A. Flood	FLOO3001/JEK	5621
23364	7590	06/23/2005	EXAMINER	
BACON & THOMAS, PLLC 625 SLATERS LANE FOURTH FLOOR ALEXANDRIA, VA 22314			SHAW, CLIFFORD C	
			ART UNIT	PAPER NUMBER
			1725	

DATE MAILED: 06/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/716,505	<b>Applicant(s)</b> FLOOD, DALE A.	
	<b>Examiner</b> Clifford C. Shaw	<b>Art Unit</b> 1725	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

**Detailed Action**

1.) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2.) Claims 1-4 and 9-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flood et al. (5,686,002) taken with the Lyman excerpt. Figure 4 and the discussion at columns 5-6 in the patent to Flood et al. (5,686,002) disclose the subject matter claimed except for the limitations directed to conducting the root pass in the substantial absence of moisture using a gas delivery hose that prevents the permeation of gas into the shield gas. This difference does not patentably distinguish over the prior art. The Lyman excerpt discusses at page 124 the use of hoses and fittings for supplying shielding gases to a gas tungsten arc system. The excerpt notes that "... even the slightest deposit of water in the line will contaminate the inert atmosphere..." and also recommends that plastic hoses be used for gas lines. It would have been obvious that the artisan of ordinary skill implement the broad teaching of Flood et al. (5,686,002) to use a gas line at element 30 using any conventional approach. In particular, it would have been obvious to have used moisture impervious tubing as claimed, the motivation being the teachings of the Lyman excerpt that any amount of moisture in the gas line is detrimental to gas tungsten arc welding. In regard to the particular permeability coefficients claimed and the particular hose compositions, it would have been obvious to have implemented the broad teachings of the

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Lyman excerpt to use a plastic hose with any conventional material, including one with the features claimed.

3.) Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flood et al. (5,686,002) taken with the prior art acknowledged by applicant. The claims differ from Flood et al. (5,686,002) in calling for particular welding electrode compositions. This difference does not patentably distinguish over the prior art. On pages 15 and 16 of his specification, applicant acknowledges that welding electrodes with the compositions claimed are known per se. The disclosure in the patent to Flood et al. (5,686,002) does not mention any particular material for the welding electrode. At the time applicant's invention was made, it would have been obvious to have used the electrode materials as claimed for the electrode 22 in Flood et al. (5,686,002), the motivation being to implement a broad teaching of Flood et al. (5,686,002) (use a tungsten electrode) with a specific known instantiation of that teaching (i.e., the known electrode materials claimed). A further motivation for using the known electrode compositions in the system of Flood et al. (5,686,002) would have been to secure the known advantages of those materials for the Flood et al. (5,686,002) system.

4.) Claims 5, 6, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flood et al. (5,686,002) taken with the Lyman excerpt as applied to claims 1-4 and 9-17 above, and further in view of the prior art acknowledged by applicant. The only aspect of the claims to which the rejection above does not apply is the provision for particular welding electrode

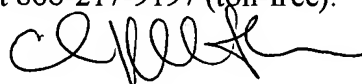
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compositions. It would have been obvious to have used the electrode compositions claimed as discussed above.

Any inquiry concerning this communication should be directed to Clifford C Shaw at telephone number 571-272-1182. The examiner can normally be reached on Monday through Friday of the first week of the pay period and on Tuesday through Friday of the second week of the pay period.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Thomas G. Dunn, can be reached at 571-272-1171. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Clifford C Shaw  
Primary Examiner  
Art Unit 1725

June 20, 2005